Claims

1. A method of evaluating a code which is orthogonal to one or more further codes, comprising the steps of:
   - receiving a signal which carries a code containing a sequence of code symbols;
   - determining for a particular symbol instant at least one channel estimate;
   - determining for the particular symbol instant a compensation value taking into account the at least one channel estimate;
   - compensating each code symbol using the compensation value determined for the corresponding symbol instant, wherein the compensation is performed such that an original power relationship among the individual code symbols contained in the code is restored; and
   - evaluating the code on the basis of the sequence of compensated code symbols exploiting the orthogonality to further codes.

2. The method of claim 1, wherein the step of evaluating the code comprises determining if the received code is identical with a known code and/or which code out of a predefined set of orthogonal codes has been received.

3. The method of claim 1 or 2, wherein the step of evaluating the code comprises associating the sequence of compensated code symbols with one or more known sequences of code symbols.

4. The method of one of claims 1 to 3, wherein the signal carrying the code is received via multiple propagation paths, wherein for the particular symbol instant individual channel estimates for at least two propagation paths are determined and wherein the compensation value for the particular symbol instant is determined taking into account the individual channel estimates determined for this symbol instant.

5. The method of claim 4, wherein in the compensation value weak propagation paths are considered with a lower significance than strong propagation paths.

6. The method of one of claims 1 to 5, wherein the compensation value is constituted by a compensation factor $c[k]$ which is calculated for a specific symbol instant k according to

$$c[k] = \frac{1}{\sum_{l=1}^{L} a_l \cdot \left| \hat{g}_l[k] \right|^2},$$

where L is the number of propagation paths to be taken into account, a_l is a weighting factor for an individual propagation path l, and $\hat{g}_l[k]$ is the channel estimate for propagation path l.

7. The method of one of claims 1 to 6, wherein the code is used in an access signaling context to identify or address a particular network component requesting access to a network resource.

8. The method of one of claims 1 to 7, wherein the code is transmitted via a first channel and wherein the channel estimates are determined on the basis of information transmitted via a second channel which is different from the first channel.

9. The method of claim 8, wherein the code transmitted via the first channel is used in a random access signaling context and/or wherein the second channel is used for transmitting signals carrying information that is known at a receiving side.

10. The method of one of claims 1 to 9, wherein the step of determining channel estimates comprises averaging for a specific propagation path each channel estimate over a number of symbol instants.

11. The method of one of claims 1 to 10, wherein the step of determining channel estimates comprises a Doppler shift adaptation of the channel estimates.

12. The method of one of claims 1 to 11, wherein the step of evaluating the code comprises a comparision with a threshold.

13. The method of claim 12, wherein the threshold is determined on the basis of a ratio between a power level used on an access signaling channel and a power level used on a channel for pilot transmission.

14. A computer program product comprising program code portions for performing the steps of one of claims 1 to 13.

15. The computer program product of claim 14, stored on a computer readable recording medium.

16. A receiver (20) for receiving a signal carrying a code which contains a sequence of code symbols and which is orthogonal to one or more further codes, comprising:
- an estimator (26) for determining for a particular symbol instant at least one channel estimate;
- a compensator (30) for determining for the particular symbol instant a compensation value taking into account the at least one channel estimate and for compensating each code symbol using the compensation value determined for the corresponding symbol instant, wherein the compensation is performed such that an original power relationship among the individual code symbols contained in the code is restored; and
- an evaluator (32) for evaluating the code on the basis of the sequence of compensated code symbols exploiting the orthogonality to further codes.

17. The device of claim 16, wherein the receiver (20) is configured as a RAKE receiver.

18. The device of claim 17, wherein the compensator (30) is configured to generate a maximum ratio combined output signal (AI_MRC).